Alternatives Analysis

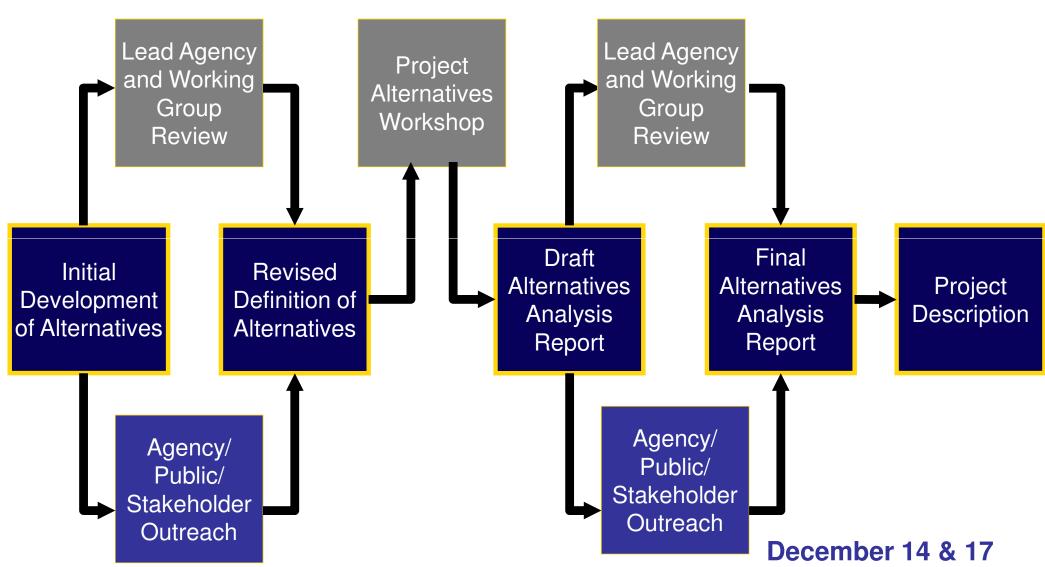
Federal Railroad Administration California High-Speed Rail Authority

Board Briefing December 3, 2009





Alternatives Analysis Process





Public Outreach Activities

- Scoping meetings / Report
- Public information meetings
- Technical Working Groups (TWG)
- Stakeholder meetings
 - Resource agencies
 - Local agencies, City Councils
 - Boards of Supervisors
 - Chambers of Commerce
- Fact Sheets
- E-mail alerts
- Media outreach
- CHSRA website updates

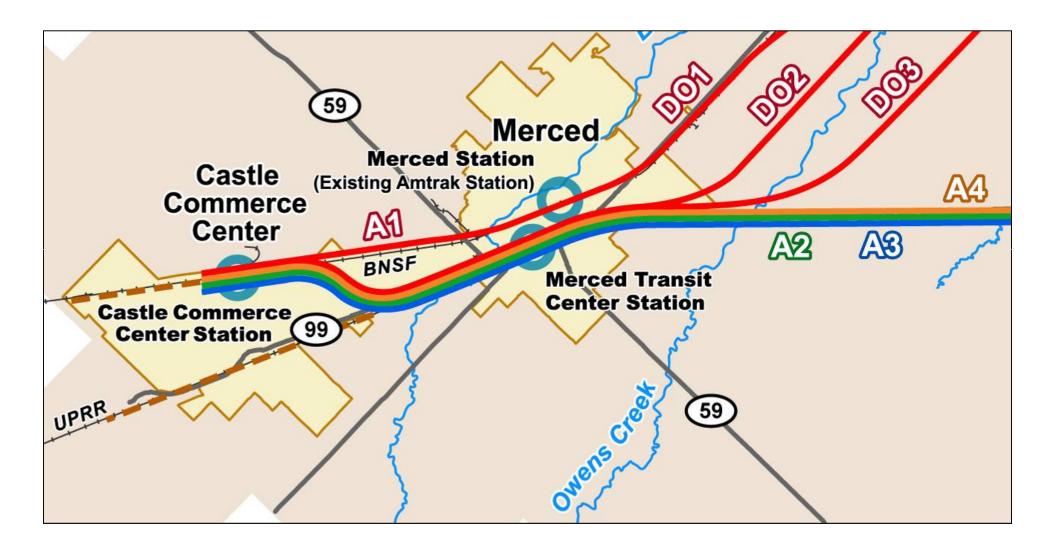








Merced Station Locations





Merced Station Evaluation



Downtown Transit Center performed best (UPRR ROW)

- Mixed use/commercial district redevelopment plans
- Good parking availability
- Excellent transit connectivity and multi-modal center
- Convenient access off of SR 99



Amtrak Station on BNSF (Alternative A1) performed worst

- Residential area
- No parking availability
- Severe traffic impacts
- Visual impacts not consistent with residential neighborhood character
- Poor access from primary highway routes



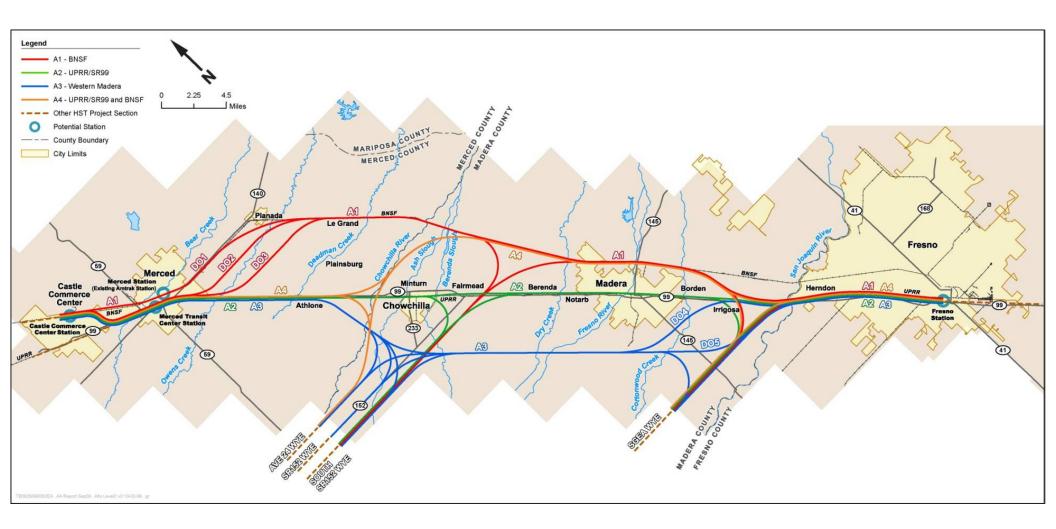
Castle Commerce Center

- Not currently a multi-modal center
- No convenient access from SR-99
- Future development potential but no current development





Alignment Alternatives Considered





Evaluation Measures

- Design Objectives travel time & cost
- Natural Environment Measures
- Environmental Resources Measures
- Community Impacts
- Agency and Community Support
- Constructability Measures
- Land Use Measures





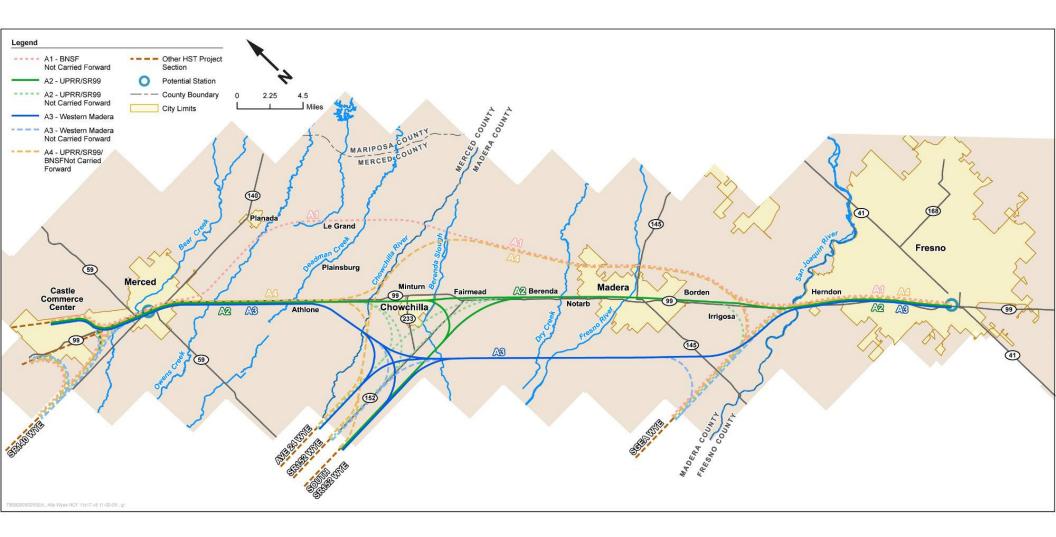
Evaluation Results

- Alternative A1: Not carried forward
 - Slowest travel time, high cost, high agricultural impacts, highest residential impacts; not supported by resource agencies
- Alternative A2: Carried forward
 - Second best travel time, fewest habitat impacts, regulatory agency support, high cost
- ✓ Alternative A3: Carried forward
 - Fastest travel time, fewest community impacts, high agricultural impacts, lowest cost
- Alternative A4: Not carried forward
 - Second slowest travel time, high cost, no environmental advantages, low resource agency support





Alternatives A2 & A3 Advanced





Alternatives A1 and A4

- Slowest travel time San Jose Fresno
- BNSF right-of-way not conducive to HSR
- No environmental advantages
 - High residential and community impacts
 - Highest agricultural impacts
 - Not supported by the regulatory agencies
 - Threatened & endangered species in vernal pool habitats
- Highest cost alternative





Alternative A2

- Second best travel time San Jose to Fresno
- Mixed environmental impacts
 - Few residential and agricultural impacts
 - Fewest impacts on threatened & endangered species
 - Supported by the regulatory agencies
 - Highest impacts to UPRR and commercial properties
 - Multiple crossings over SR99 and UPRR
- Cost ≈30% higher than lowest cost A3





Alternative A3

- Best travel time San Jose to Fresno
- Mixed environmental impacts
 - Fewest residential impacts
 - High agricultural impacts
 - Could bifurcate farmlands properties
 - Potential impacts on threatened & endangered species
- Lowest cost alternative